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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,207	05/06/2004	Mahesh C. Bhardwaj	0503-043990	7268

28289 7590 02/10/2006

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EXAMINER

GRAY, LINDA LAMEY

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/840,207	<b>Applicant(s)</b> BHARDWAJ, MAHESH C.	
	<b>Examiner</b> Linda L. Gray	<b>Art Unit</b> 1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 5-6-04, 9-13-04, and 5-6-04.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-6 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**Election/Restriction**

**1. Claim 2** is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 11-28-05.

**Claim Objections**

**2. Claim 1** is objected to because of the following informalities: "a" (L 7) should be changed to -- the --.

**Claim Rejections - 35 USC 112**

**3.** The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**4. Claims 1 and 3-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

**Claim 5** contains the trademark/trade name NOMEX. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe NOMEX and, accordingly, the identification/description is indefinite.

**Claim 1**, "the air gaps" (L 10) lack antecedent basis.

**Allowable Subject Matter**

**5. Claims 1 and 3-6 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.**

**6.** The following is a statement of reasons for the indication of allowable subject matter:

**claim 1:** Shiraishi et al. (US 2002/0130590 A1) teach a method of making matrix composite ultrasound transducer 100 including forming first structure (Fig 11) by aligning piezoelectric rods 33 substantially parallel to each other on an adhesive side of first curable adhesive-faced sheet 22 with filled in slots, forming several first structures, laminating a plurality of first structures to build a second structure (Fig 12), cutting the second structure perpendicular to rods 33 into narrow slices 9 (Fig 13) to form a third structure, and applying outside layers to each face of the third structure as well as electrodes 92 having electrical contact with rods 33 (Fig 22) (papa 0173-0194; 0304-0305). Zola (US 4,514,247) teach a matrix composite ultrasound transducer (Fig 4) having conductive layers 45 on each face a sandwich of passive/piezoelectric layers (c 3-4). However, Shiraishi et al. do not teach and it would not have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Shiraishi that the second structure is made differently -- placing a second sheet with adhesive on both sides over the first structure so as to provide a gap between rods 33, aligning rods 33 on the second sheet, repeating these steps a plurality of times to build the second structure so as to maintain the air gaps between rods 33, and curing the adhesive in the second structure because Shiraishi et al. specifically require cured sheets 22, no air gaps, and forming rods 33 from each 32/22 combination; and also specifically require applying resin and iron/ceramic to each face of the third structure and does not teach conductive layers to each face of the third structure.

**7.** As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

**Conclusion**

**8.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linda L. Gray whose telephone number is (571) 272-1228. The examiner can normally be reached on Monday-Friday, 9:00am to 5:00pm.

**Art Unit: 1734**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

llg

February 6, 2006



LINDA GRAY  
PRIMARY EXAMINER